



Powell River 2006

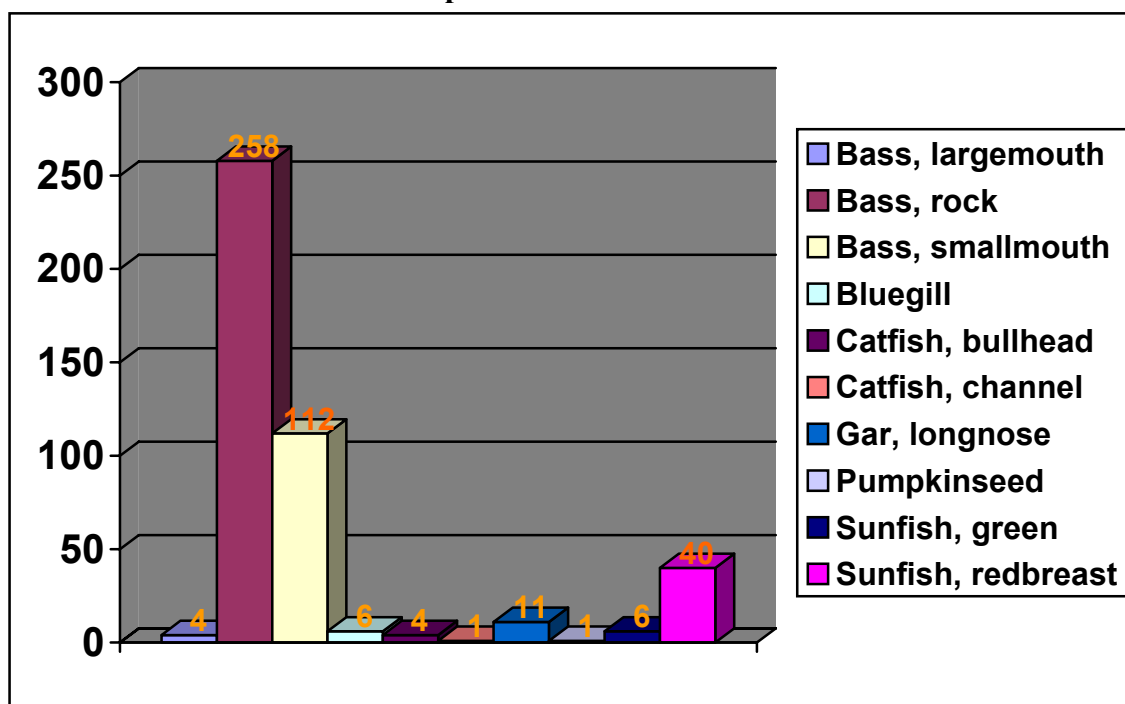
Introduction:

The headwaters of the Powell River are located in Wise County, Virginia, and the river flows approximately 80 miles through Wise and Lee counties before entering the state of Tennessee. In 2005 the river was sampled in Lee County to evaluate the fishery. Samples were collected using an electrofishing boat over a 4-mile section of the river in Virginia. A complete community sample was made.

General Sport Fishery:

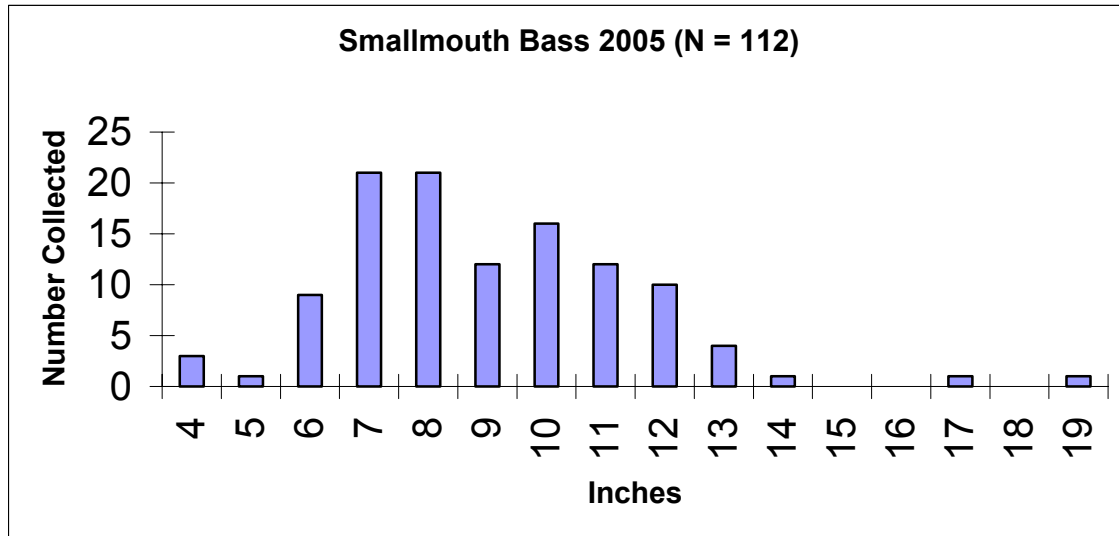
The Powell River supports several sport fish species like smallmouth bass, largemouth bass, spotted bass, rock bass, sunfish, walleye, sauger, musky, channel catfish and freshwater drum. Channel catfish, walleye and muskie are stocked annually, when available, to enhance these fisheries while populations of the other species remain stable. The following report summarizes the 2005 collections of smallmouth bass, rock bass and redbreast sunfish that make up 92% of the total sport fish catch and future management activities planned for the Powell River.

2005 Sport Fish Catch Powell River



Smallmouth Bass Fishery:

Average smallmouth bass catch rates for 13 samples collected in 2005 were 35 fish per hour (standard deviation 12.2, range 16-52 / hr.). The average size of smallmouth bass within the population remains small at 215 mm or 8.5 inches (n = 112, standard deviation 62.4 mm, range 80-475 mm).



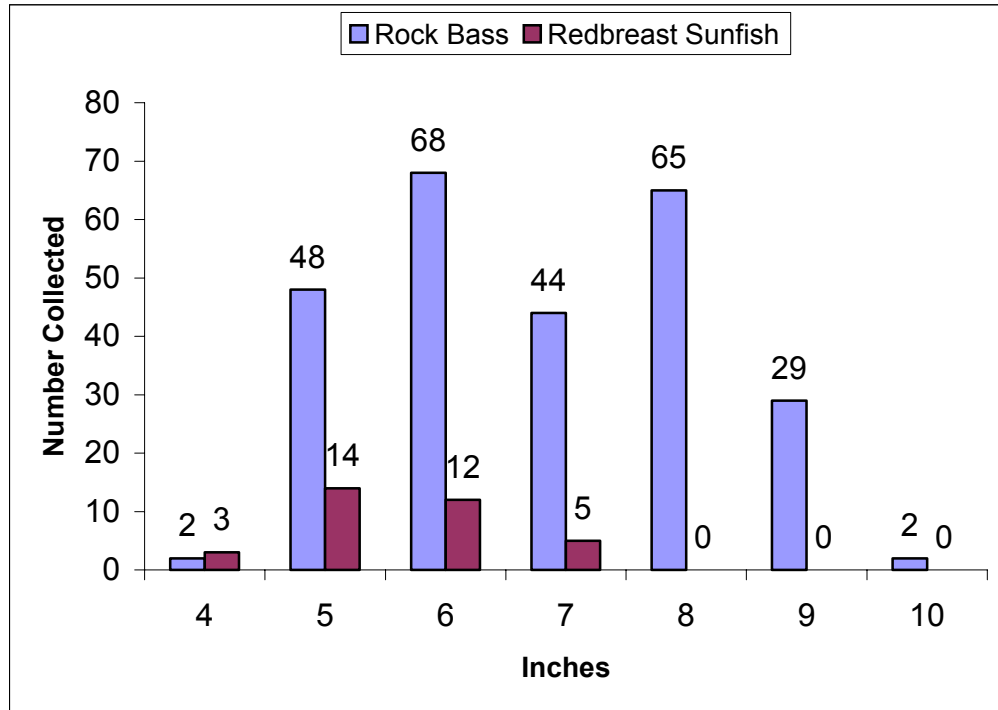
In 2005 the PSD (Proportional Stock Density is an index that measures the percentage of adult fish that are 280 mm (11 inches) or larger in the population) for smallmouth bass did not exceed 23, which means that only 22% of the smallmouth bass in the population sampled are \geq 280 mm (11 inches). Body condition of smallmouth bass is measured by relative weight (Wr). Relative weight is an index of the fatness or plumpness of a fish. When a fish is in a good condition or good health the relative weight is measured close to 100. When relative weights are well below 100 the fish may have trouble feeding, causing the body condition to be less. Smallmouth bass condition has remained similar in 2002, 2003 and 2005. The following tables summarize the condition and relative weight for the sampling years.

Common Name:	Year:	N:	PSD:
Bass, smallmouth	2002	70	22.22
Bass, smallmouth	2003	187	22.92
Bass, smallmouth	2005	112	21.74

Common Name	Year	Wr	Wr(Stock)	Wr(Quality)	Wr(Preferred)
Bass, smallmouth	2002	94.74	94.74	89.06	88.12
Bass, smallmouth	2003	93.95	93.95	93.45	93.76
Bass, smallmouth	2005	90.27	90.27	80.81	77.63

Rock Bass & Redbreast Sunfish Fishery:

Rock bass were the most abundant species collected in 2005. Average rock bass catch rates for 13 samples collected were 83 fish per hour (standard deviation 43/hr, range 24-188/hr.). The average size of rock bass within the population was 161 mm or 6.3 inches (n = 258, standard deviation 33.1 mm, range 85-231 mm). Redbreast sunfish were less abundant with a total of 40 collected in 13 samples. The following graph shows the catch of rock bass and redbreast sunfish in 2005 samples.



In 2005, 21,500 walleye fingerlings were stocked, and this stocking will be evaluated in spring 2006. In addition, channel catfish were also stocked. Muskie fingerlings were requested for stocking in 2006 along with walleye and channel catfish. Sampling will be completed in spring 2006.

Prepared by: George Palmer, Fisheries Biologist with the Virginia Department of Game and Inland Fisheries: (276) 783-4860; george.palmer@dgif.virginia.gov